

REMARKS

In accordance with the foregoing, new claims 29-34 have been added. Claims 12, 14-16, 22, and 24-34 are pending, with claims 12 and 22 being independent. No new matter is presented in this Amendment.

Request for Consideration of Information Disclosure Statements

Information Disclosure Statements were filed on November 3 and 17, 2006, and it is respectfully requested that these Information Disclosure Statements be considered.

Claims Rejections Under 35 USC 102

Claims 12, 14-16, 26, and 28 and 22, 24, and 27 (i.e., claims 12, 14-16, 22, 24, and 26-28) were rejected under 35 USC 102(e) as being anticipated by Yamazaki et al. (Yamazaki '190) (U.S. Patent Application Publication No. 2004/0041190). This rejection is respectfully traversed.

It is submitted that FIG. 6E of Yamazaki '190 does not disclose "source and drain electrodes which respectively contact said high-density source and drain regions without contact holes" as recited in independent claim 12 and 22 as alleged by the Examiner. The Examiner states that FIG. 6E of Yamazaki '190 discloses "source and drain electrodes 614/615 which respectively contact said high density source and drain regions without contact holes -- note that contact holes which might have been formed previously do not exist in the final structure as they have been filled with electrode materials." However, the Examiner's interpretation of the term "contact hole" is contrary to the accepted meaning of this term in the art, which is a hole formed through an insulating layer to enable a source or drain electrode to contact a source or drain region that is covered by the insulating layer by filling the contact hole with electrode material. Furthermore, Yamazaki '190 itself calls the holes in FIG. 6E through which source and drain electrodes 614 and 615 contact source and drain regions 609 and 610 shown in FIG. 6C "contact holes." See FIG. 5B and paragraph [0075], lines 1-3, of Yamazaki '190. The Examiner's interpretation of the term "contact hole" improperly ignores the fact that in FIG. 6E of Yamazaki '190, source and drain electrodes 614 and 615 contact the source and drain regions 609 shown in FIG. 6C through the contact holes that are clearly shown in FIG. 6E.

It is submitted that Yamazaki '190 does not disclose the feature "wherein said first insulating layer . . . [is] one of an oxide layer and a nitride layer" as recited in dependent claim 14. The Examiner considers gate insulating film 603 in FIG. 6A to correspond to "said first insulating layer" as recited in claim 14. However, Yamazaki '190 does not disclose what gate insulating film 603 is made of.

Furthermore, it is submitted that FIG. 6E of Yamazaki '190 does not disclose or suggest the feature "wherein the source and drain electrodes do not contact the high-density source and drain regions via any electrode material filling any contact holes" recited in new dependent claims 29 and 32 respectively depending from claims 12 and 22 because FIG. 6E of Yamazaki '190 clearly shows that source and drain electrodes 614 and 615 do contact source and drain regions 609 and 610 shown in FIG. 6C via electrode material filling the contact holes that are clearly shown in FIG. 6E.

Accordingly, for or at least the foregoing reasons, it is submitted that claims 12, 14-16, 22, 24, 26-29, and 32 (i.e., claims 12, 14, 22, 29, and 32 discussed above and claims 15, 16, 24, and 26-28 depending directly or indirectly from claims 12 and 22) are patentable over Yamazaki '190, and it is respectfully requested that the rejection of claims 12, 14-16, 22, 24, and 26-28 under 35 USC 102(e) as being anticipated by Yamazaki '190 be withdrawn and that claims 29 and 32 be allowed.

Claim Rejections Under 35 USC 103

Claims 12 and 14 were rejected under 35 USC 103(a) as being unpatentable over Zhang (U.S. Patent Application Publication No. 2002/0105033) in view of Yamazaki et. al. (Yamazaki '288) (U.S. Patent No. 5,568,288). This rejection is respectfully traversed.

The Examiner relies on the partial transistor structure shown in FIGS. 10A-10F of Zhang to show all of the features of independent claim 12 except "source and drain electrodes which respectively contact said high-density source and drain regions without contact holes." However, the Examiner considers FIGS. 21(A), 21(B), 22(F), and 22(G) of Yamazaki '288 to disclose "source and drain electrodes which respectively contact said high-density source and drain regions without contact holes" as recited in claim 12, and is of the opinion that "one having ordinary skill in the art at the time the invention was made would be motivated to modify Zhang's

device by incorporating the teachings of Yamazaki so as to complete the thin film transistor as taught by Yamazaki '288."

Thus, the motivation identified by the Examiner appears to be based on the Examiner's understanding that Zhang does not disclose how to connect electrodes to the source and drain regions 124 shown in FIG. 10F of Zhang. However, it is submitted that Zhang does in fact disclose how to do this in FIGS. 6A-6D of Zhang using contact holes CH as described in paragraph [0103], lines 3-5, of Zhang. Accordingly, it is submitted that there would have been no reason for one of ordinary skill in the art to look to Yamazaki '288 for how to connect electrodes to the source and drain regions 124 shown in FIG. 10F of Zhang, such that the combination of Zhang and Yamazaki '288 proposed by the Examiner is based solely on an improper hindsight reconstruction of the applicants' invention arrived at by reading the applicants' disclosure.

Furthermore, it is submitted that the combination of FIGS. 10A-10B of Zhang and the source and drain electrodes in FIGS. 21(A), 21(B), 22(F), and 22(G) of Yamazaki '288 proposed by the Examiner does not disclose or suggest the feature "wherein the capping layer and the spacers are separate layers" recited in new dependent claim 30 depending from claim 12 because alumina layer 109 in FIGS. 10A-10F of Zhang which the Examiner considers to correspond to the "capping layer" and "spacers" recited in claim 12 is a single layer, rather than separate layers as recited in claim 30.

Also, it is submitted that the combination of FIGS. 10A-10B of Zhang and the source and drain electrodes in FIGS. 21(A), 21(B), 22(F), and 22(G) of Yamazaki '288 proposed by the Examiner does not disclose or suggest the features "wherein the source and drain electrodes do not contact the capping layer" and "wherein the source and drain electrodes do not contact the spacers" recited in new dependent claim 31 depending from claim 12 because in FIGS. 21(A), 21(B), 22(F), and 22(G) of Yamazaki '288, the source and drain electrodes 102 do contact insulating film 106 which may arguably be considered to be "a capping layer" as recited in claim 12, and do contact anodic oxidation films 100 which may arguably be considered to be "spacers" as recited in claim 12.

Accordingly, for or at least the foregoing reasons, it is submitted that claims 12, 14, 30, and 31 (i.e., claims 12, 30, and 31 discussed above and claim 14 depending from claim 12) are patentable over Zhang and Yamazaki '288, and it is respectfully requested that the rejection of

claims 12 and 14 under 35 USC 103(a) as being unpatentable over Zhang in view of Yamazaki '288 be withdrawn and that claims 30 and 31 be allowed.

Claim 25 was rejected under 35 USC 103(a) as being unpatentable over Yamazaki (presumably Yamazaki '190) in view of Yamazaki et al. (Yamazaki '502) (U.S. Patent Application Publication No. 2003/0207502). This rejection is respectfully traversed.

As recognized by the Examiner, Yamazaki '190 does not disclose "an organic electroluminescence (EL) layer and a cathode electrode sequentially formed on a first predetermined area of said pixel electrode and on a second predetermined area of said planarization layer" as recited in dependent claim 25. However, the Examiner considers EL layer 4029 and cathode 4030 described in "par. 0343" (presumably meant to be paragraph [0334]) of Yamazaki '502 and shown in FIG. 25B of Yamazaki '502 to correspond to these features of claim 25, and is of the opinion that it would have been obvious to incorporate these features into the device disclosed by Yamazaki '190 (presumably in FIG. 10 of Yamazaki '190) "so as to realize a high efficiency integrated device."

However, the stated purpose of Yamazaki '190 is to provide a projection TV using a reflection-type liquid crystal device or a transmission-type liquid crystal device as described, for example, in paragraphs [0002], [0007], [0026], [0027], [0035], [0078], [0080], [0167], [0168], [0170], [0205], [0206], [0216], [0224], and [0242] of Yamazaki '190. Accordingly, it is submitted that replacing the liquid crystal layer 1005 in FIG. 10 of Yamazaki '190 with electroluminescent EL layer 4029 and cathode 4030 in FIG. 25B of Yamazaki '502 as apparently proposed by the Examiner would render the device of Yamazaki '190 unsuitable for its intended purpose of providing a projection TV using a reflection-type liquid crystal device or a transmission-type liquid crystal device, and would also change the principle of operation of the device of Yamazaki '190, such that there is no suggestion or motivation for one of ordinary skill in the art to combine Yamazaki '190 and Yamazaki '502 in the manner proposed by the Examiner pursuant to MPEP 2143.01(V) and (VI) (see page 2100-129 and 2100-130 of the MPEP).

Accordingly, for at least the foregoing reasons, it is respectfully requested that the rejection of claim 25 under 35 USC 103(a) as being unpatentable over Yamazaki '190 in view of Yamazaki '502 be withdrawn.

Patentability of New Claims 33 and 34

It is submitted that new dependent claims 33 and 34 which depend from independent claim 22 are patentable over Yamazaki '190 for at least the same reasons discussed above that claim 22 is patentable over Yamazaki '190, and accordingly it is respectfully requested that claims 33 and 34 be allowed.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

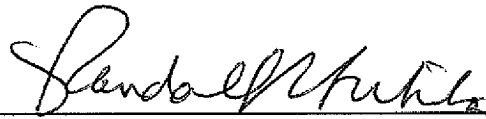
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this paper, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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